

**Low Fluorescence Nylon/Glass Composites**  
**for Micro-Analytical Diagnostic Applications**

**ABSTRACT OF THE DISCLOSURE**

An improved combination non-luminescent microporous membrane and solid support for use in micro-analytical diagnostic applications  
5 is disclosed. Specifically, a multi-cell non-luminescent substrate having a porous membrane formed by a phase inversion process effectively attached by covalent bonding through a surface treatment to a substrate that prepares the substrate to sufficiently, covalently bond to the non-luminescent microporous membrane formed by a phase inversion process such that the combination produced thereby is useful in microarray applications and wherein the porous  
10 non-luminescent nylon multi-cell substrate is covalently bonded to a solid base member, such as, for example, a glass or Mylar microscope slide, such that the combination produced thereby is useful in microarray applications. Apparatus and methods for fabricating the non-luminescent multi-cell substrate are also  
15 disclosed.